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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/562,455

12/27/2005

Fabio Sigon

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EXAMINER

SMITH, JENNIFER A

ART UNIT

PAPER NUMBER

1793

MAIL DATE

DELIVERY MODE

12/31/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/562,455	Applicant(s) SIGON ET AL.	
	Examiner JENNIFER A. SMITH	Art Unit 1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) 12-22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>3/7/2007</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of Application

Applicant's election without traverse to prosecute the invention of Group I (claims 1-11) in the reply filed on 09/22/2008 is acknowledged. Claims 12-22 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim.

Claims 1-11 are presented for examination.

Information Disclosure Statement

The information disclosure statement (IDS) submitted on 03/07/2007 is in compliance with the provisions of 37 CFR 1.97 and has been considered by the examiner.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Modell (US Patent No. 4,338,199) in view of Godesbert (US Patent No. 5,562,585).

In regard to claim 1, Modell teaches a supercritical water oxidation process used to process toxic and waste substances, illustrated in Figure 1A. Water is removed from the feed tank (11a) and heated (41) at a temperature and pressure to transform into supercritical water. Oxidation of the feed and supercritical water is performed in tank 19a. The mixture is cooled and waste heat is recycled via line 40. The inorganics precipitate and are removed by filters [See Column 3, lines 43-45]. Steam or water is recovered in output 30a. The Modell reference teaches it is part of the invention to precipitate inorganics in the feed as from a waste slurry, since the solubility of inorganic salts in supercritical water drops to very low levels thus causing inorganics in the stream to precipitate and be readily removed as by cyclones, settling columns or filters. Thus the water output from the system is purified of inorganic salts. In addition, the feed water need not be purified prior to use allowing the use of brine or seawater without prior treatment [See Claim 4].

Modell fails to explicitly teach the waste inorganic material to be asbestos.

The Godesbert reference teaches a hydrothermal waste treatment of asbestos [See Column 2, lines 1-4].

One of skill in the art would recognize Modell's process as capable of use with asbestos materials like those disclosed in Godesberg because it is desirable to operate a technically simple and safe method of disposal of asbestos and asbestos containing materials on an industrial level [See Column 1, lines 61-67]. Modell does not limit the invention to the type of waste and teaches the precipitation of inorganic materials.

In regard to claim 2, the references fail to teach distilling the water but one of skill in the art would recognize the use of purified water as advantageous in any waste treatment process.

In regard to claim 3, Modell teaches the supercritical water is oxygenated (wet air) [See Background of the Invention].

In regard to claim 4, Godesberg et al. teaches fine-fibrous asbestos causes tissues to become diseases and in particular is linked to lung cancer if breathed in. One of skill in the art would recognize the need to operate the process disclosed by the

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references in a confined environment because asbestos is a dangerous material and this would ensure safe handling and disposal of the waste [See Column 1, lines 14-23].

In regard to claim 5, Modell teaches the process is continuous after startup [See Column 7, lines 57-59].

In regard to claims 6 and 7, the references fail to explicitly teach a preferred operation method but one of skill in the art would recognize both processes, based on the design of the apparatus used, as capable of continuous, discontinuous, or semi-batch operation.

In regard to claim 8, Modell teaches operating temperatures between 450-700°C, pressures above 3200 psia (22.1 MPa) and a process time in the range of 0.5 to 1 hour [See Column 3, lines 8 and 30 and Column 1, line 34].

In regard to claims 9-11, Godesberg teaches if necessary in a treatment process, the asbestos may be shredded before the coarsely comminuted asbestos fragments are exposed to treatment [See Column 1, lines 55-57]. It is particularly advantageous that this method is carried out in an aqueous suspension so no harmful dust formation can occur [See Column 2, lines 15-17].

Conclusion

Claims 1-11 are rejected.

No claims are allowed.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to JENNIFER A. SMITH whose telephone number is (571)270-3599. The examiner can normally be reached on Monday - Friday, 8:30am to 5:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on (571)272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J.A. LORENZO/
Supervisory Patent Examiner, Art Unit 1793

Jennifer A. Smith
December 20, 2008
TC 1793

JS